

## PRESS RELEASE

Contacts:

Sara Secomandi, +39 0331 444 110, <u>sara.secomandi@tenova.com</u> Roberto Carnazza, +39 3497746017, <u>roberto.carnazza@edelman.com</u>

## Industry 4.0: A Made-in-Italy Project for Metal 3D Printing

# Six SMEs, two Universities and three Big Industries led by Tenova together to implement MADE4LO, a project on metal 3D printing

**Castellanza, 30 August 2017** – A "widespread" factory for the development of metal 3D printing technology: this is the objective of the project Metal ADditivE for LOmbardy (**MADE4LO**), which will start in the upcoming autumn under the leadership of Tenova, international company specialized in the development of innovative solutions for the mining and metal industry.

The ultimate goal of this pilot project is to cover the entire value chain – from equipment supply to the finished product – creating a new model of factory based on 3D manufacturing, network infrastructure and digital processes accessible to several partners, and intensive training activities of the technical staff involved.

The project, partially funded by the European Regional Development Fund in the framework of Lombardy Region's Research and Development Agreements, will last 30 months for a total investment of 6.6 million euros, involving eleven partners from Lombardy, north-western Italian region, specifically two Universities (Politecnico di Milano and Università di Pavia), three Big Industries (Tenova, BLM, and GF Machining Solutions), and six SMEs (TTM Laser, 3D-NT, GFM, Fubri, Co. Stamp, and Officine Meccaniche G. Lafranconi).

### Additive Manufacturing

Metal additive manufacturing (AM), also known as metal 3D printing, makes possible to produce complex three-dimensional objects starting directly from a 3D CAD model by adding material layer by layer, without the design constraints of traditional manufacturing routes. No longer solely a prototyping technology and in spite of today limitation in size and available metal powders, AM is now emerging as a competitive process for the production of series components for the most demanding applications while reducing material inventory.











POR FESR 2014-2020 / INNOVAZIONE E COMPETITIVITÀ

"For Tenova digital innovation is a crucial factor in the creation of added value to the client. MADE4LO represents an important opportunity to achieve concrete outcomes in the development of additive manufacturing for metal components, a technology that affects us both as users and as plant engineers. Our goal is to become a key player in this sector in order to provide our clients with effective solutions which will make them more dynamic and competitive on the market" affirmed **Andrea Lovato**, CEO.

All Business Units of Tenova Metals are involved in the implementation of MADE4LO to define the most cost/effective equipment's for metal powder production process, to select, design and test the metal components to produce by AM, and to design and manufacturing of a heating treatment furnace to be installed at Pomini factory within Tenova HQs.

"MADE4LO is the first pilot project developed in Lombardy in the field of additive manufacturing which involves a network of physical and digital systems interconnected with each other, which exchange products and information through a widespread infrastructure (digital information on the product to be printed, powder and process data, data gathered from the process related to the qualification of the realized products)", commented Professor **Marco Bocciolone**, Director of the Mechanics Department of Politecnico di Milano.

Along with the great potential of digitalization and interconnection offered by this new Italian platform dedicated to AM, Professor **Barbara Previtali**, Scientific Supervisor of the project, pointed out how the focus of applications and the sectors of development targeted through MADE4LO go beyond the area where additive processes are currently applied. "*MADE4LO will explore new applications in relevant sectors like the printing of new metals' components (such as copper and tool steel alloys) or the additive and subtractive repairing/revamping of big components of high added value".* 

#### About Tenova

Tenova, a Techint Group company, is a worldwide partner for innovative, reliable and sustainable solutions in metals and mining. Leveraging a workforce of over three thousand forward-thinking professionals located in 22 countries across 5 continents, Tenova designs technologies and develops services that help companies reduce costs, save energy, limit environmental impact and improve working conditions.

For more information, visit www.tenova.com









POR FESR 2014-2020 / INNOVAZIONE E COMPETITIVITÀ